

REMARKS

In the Official Action, the Examiner rejected claims 1-30. Independent claims 1, 6, 9, 12, 16, 22, 25 and 28 have been amended to set forth the recited subject matter more clearly. Applicant respectfully requests reconsideration of the application in view of the remarks set forth below. Applicant believes that all pending claims are in condition for allowance.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-15, 20-23, and 25-30 under 35 U.S.C. § 102(e) as being anticipated by Kelly (U.S. Patent No. 5,996,036). With specific regard to the independent claims, the Examiner stated:

Regarding claims 1, 6, 9, and 25, Kelly discloses methods and system means for temporarily storing transaction entries (e.g., col. 9, lines 30-36); selecting one of the plurality of temporarily stored entries and enqueueing the selected one (e.g., col. 9, lines 44-46).

Regarding claim 12, Kelly discloses temporary storage to store a plurality of transaction entries (e.g., col. 9, lines 30-36), selecting and ordering the plurality of entries (e.g., col. 9, lines 44-46).

Regarding claim 22, Kelly discloses a processor and memory, and a transaction order queue circuit configured to process transactions from the memory device the transaction order queue circuit being adapted to encode a plurality of simultaneous transaction entries (e.g., col. 9, lines 44-46).

Regarding claim 28, Kelly discloses methods and system means for temporarily storing transaction entries (e.g., col. 9, lines 30-36), selecting one of the plurality of temporarily stored entries and transmitting according to priority (e.g., col. 8, line 62 – col. 9, line 2).

Applicant respectfully traverses these rejections. A *prima facie* case of anticipation

under 35 U.S.C. § 102 requires a showing that each limitation of a claim is found in a single reference, practice or device. *In re Donohue*, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

Anticipation under 35 U.S.C. § 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under 35 U.S.C. § 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

As discussed further below, Applicant respectfully submits that the Kelly reference does not disclose all of the recited features of claims 1-15, 20-23 and 25-30, as amended and therefore, respectfully requests withdrawal of the Examiner's rejections under 35 U.S. C. § 102(e) and allowance of claims 1-15, 20-23 and 25-30.

In addressing Applicant's prior response, the Examiner stated:

Applicant argues that passages cited in Kelly "is the address bus arbiter state machine" (p.16); this is indeed the correct passage. Applicant argues that "the Kelly reference cannot possibly disclose 'enqueueing the selected one of the plurality of the temporarily stored transaction entries *in the transaction order queue*'" (p.16, emphasis original). Applicant argues similarly on subsequent pages 17-18: "Kelly reference fails to disclose enqueueing (or delivering entries to) a transaction order queue" (p.17) and "[f]or reasons very similar

to those discussed above with regard to claims 1, 6, 9, and 25, independent claims 12, 22, and 28 are also clearly not anticipated by the Kelly reference. Since the Kelly reference does not disclose a transaction order queue, it cannot disclose ‘logic adapted for selecting and ordering the plurality of transaction entries in the transaction order queue,’ as recited in claim 12” (p. 18).

However the transaction order queue as it is claimed is anticipated by Kelly’s arbiter. In the claimed invention, a single entry is selected from the temporary queue and then enqueueued. It is the obligation of the Examiner to assume the broadest reasonable interpretation of the claimed invention. For the purposes of examination, a *queue with a single entry as it is currently recited must be considered equivalent to a buffer*. This is consonant with a selection of a *single entry* and the *enqueueuing* of that single entry. In Kelly the buffers that drive the bus are adequate to enqueue a single entry and the process of enqueueuing consists of latching the data output from the temporary queues as a result of arbitration into a buffer for driving the bus, an interpretation supported, for example, by Kelly’s arbiter multiplexor (e.g., col. 9, lines 56-67). Although a queue may typically have more than one element, in no claim does the recitation support this. To distinguish over Kelly the claimed invention must be appropriately narrowed.

Independent claims 1, 6, 9, 12, 22, 25 and 28 have been amended to set forth the recited subject matter more clearly. Generally, Applicant has amended the recited transaction order queue to clarify the intended scope of the claims, such that the transaction order queue is comprises a plurality of storage locations. Specifically, independent claim 1 recites “enqueueuing the selected one of the plurality of temporarily stored transaction entries into one of a plurality of storage locations in the transaction order queue.” Independent claim 6 recites “providing a transaction order queue comprising a plurality of storage locations, wherein each of the plurality of storage locations is configured to receive the selected one of the plurality of temporarily stored transaction entries.” Independent claim 9 recites “means for enqueueuing the selected one of the plurality of temporarily stored transaction entries in one of a plurality of storage locations of a transaction order queue.” Independent claim 12 recites “logic adapted for selecting and ordering the plurality of transaction entries in the transaction order queue from

the temporary memory storage for processing, wherein the transaction order queue comprises a plurality of storage locations.” Independent claim 22 recites “a transaction order queue circuit configured to process transactions from the memory device, the transaction order queue circuit being adapted to encode a plurality of simultaneous transaction entries, and comprising a transaction order queue comprising a plurality of storage locations, wherein each of the plurality of storage locations is configured to store one of the transactions from the memory device.” Independent claim 25 recites “delivering the plurality of transaction entries to a transaction order queue one at a time, wherein each of the plurality of transaction entries is stored in a respective one of a plurality of storage locations in the transaction order queue.” Independent claim 28 recites “transmitting the stored transaction entries to the transaction order queue according to priority, wherein each of the stored transaction entries is transmitted to one of a plurality of storage locations in the transaction order queue.”

As indicated by the Examiner, while Applicant does not necessarily agree with the Examiner’s correlation of the bus buffers disclosed in Kelly with the presently recited transaction order queue, Applicant has amended each of the independent claims to clearly set forth that the transaction order queue comprises a plurality of storage locations. As indicated by the Examiner, this amendment should be sufficient to distinguish over Kelly, since at best, Kelly simply discloses a buffer capable of storing a single entry. Accordingly, Applicant submits that the Kelly reference fails to anticipate the recited claims, as amended, and respectfully requests withdrawal of the Examiner’s rejection and allowance of independent claims 1, 6, 9, 12, 22, 25 and 28, as well as those claims dependent thereon.

Rejections Under 35 U.S.C. § 103

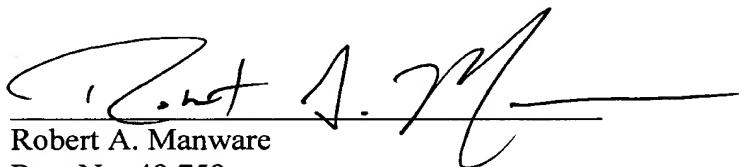
In the Office Action, the Examiner rejected claims 16-19, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Kelly in view of Willenborg (U.S. Pat. No. 6,477,610). Applicant respectfully traverses this rejection.

For the reasons discussed above with regard to the rejections under 35 U.S.C. § 102, it is clear that the Kelly reference does not disclose a transaction order queue having the limitations and features recited in claim 16. Applicant respectfully asserts that the Willenborg reference fails to cure the deficiencies of the Kelly reference with regard to the transaction order queue. Specifically, claim 16, as amended, recites “a transaction order queue comprising a plurality of storage locations, each of the plurality of storage locations being configured to receive and enqueue the selected transaction entries.” As discussed above, Kelly does not disclose a transaction order queue comprising a plurality of storage locations. The Willenborg reference fails to disclose this feature, as well. Accordingly, neither of the reference taken alone or in combination, discloses the subject matter presently recited in claim 16. As such, Applicant respectfully submits that the cited references cannot possibly render the claimed subject matter obvious. Therefore, Applicant respectfully requests withdrawal of the Examiner’s rejection and allowance of claims 16-19.

Conclusion

In view of the remarks and amendments set forth above, Applicant respectfully requests allowance of the pending claims 1-30. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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